



## Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS HCS 2012

Trade name: I & I Calcium, Lime and Rust Remover

<b>Product identifier</b>	I & I Calcium, Lime and Rust Remover	ST-1257
<b>Other means of identification</b>	AM10	
<b>Recommended use</b>	Non-foaming acid cleaner to remove stubborn mineral deposits	
<b>Recommended restrictions</b>	Not to be mixed with anything but water.	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Manufacturer</b>		
<b>Company name</b>	Stearns Packaging Corporation	
<b>Address</b>	4200 Sycamore Avenue (53714) PO Box 3216 Madison, WI 53704-0216	
<b>Telephone</b>	Phone: 800-655-5008	
<b>Fax</b>	1-608-246-5149	
<b>Email</b>	stearns@stearnspkg.com	
<b>Website</b>	www.stearnspkg.com	
<b>Emergency phone number</b>	ChemTel Inc. (800)255-3924, +1 (813)248-0585	

## 2. Hazards Identification

<b>Physical hazards:</b>	Corrosive to metals.	Category 1
<b>Health hazards</b>	Skin corrosion/irritation	Category 1C
	Serious eye damage/eye irritation	Category 1

### Label elements



<b>Signal word</b>	Danger
<b>Hazard statement</b>	Causes severe skin burns and serious eye damage. May be corrosive to metals.

### Precautionary statement

<b>Prevention</b>	Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection. Do not breathe mists. Keep only in original container.
<b>Response</b>	<p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.</p> <p>IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. DO NOT induce vomiting.</p> <p>IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. Immediately call a poison center / doctor.</p> <p>IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or a physician.</p> <p>Absorb spillage to prevent material damage.</p>

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<b>Storage</b>	Store locked up. Store in a corrosive resistant container with a resistant inner liner.
<b>Disposal</b>	Dispose of contents in accordance with local regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

### 3. Composition/Information on Ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Phosphoric acid		7664-38-2	40-50%

### 4. First-Aid Measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately.
<b>Skin contact</b>	Take off contaminated clothing immediately. Flush with cool water. Wash with soap and water. Get medical attention immediately. Wash clothing before reuse.
<b>Eye contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Get medical attention immediately.
<b>Ingestion</b>	Rinse mouth. Do not induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention immediately.
<b>Most important symptoms/ effects, acute and delayed</b>	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.
<b>Indication of immediate medical attention and special treatment needed</b>	Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-Fighting Measures

<b>Suitable extinguishing media</b>	Dry chemical, CO <sub>2</sub> , water spray or regular foam.
<b>Unsuitable extinguishing media</b>	Not available.

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<b>Specific hazards arising from the chemical</b>	During fire, toxic gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental Release Measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	This product is miscible in water. Stop the flow of material, if this is without risk.  Large Spills: Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and Storage

<b>Precautions for safe handling</b>	Do not get this material in contact with eyes. Avoid contact with skin. Avoid prolonged exposure. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use care in handling/storage. Avoid release to the environment. Do not empty into drains.
<b>Conditions for safe storage, including any incompatibilities</b>	Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children. Store between -30° and 45°C.

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## 8. Exposure Controls/Personal Protection

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Components	Type	Value
Phosphoric Acid (CAS 7664-38-2)		1 mg/m <sup>3</sup>
	STEL	3 mg/m <sup>3</sup>

#### US. OSHA Table Z-1 Limits for Air Contaminants

Components	Type	Value
Phosphoric Acid (CAS 7664-38-2)	PEL	1 mg/m <sup>3</sup>

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls** General ventilation normally adequate. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

### Individual protection measures, such as personal protective equipment

#### Exposure guidelines

**Eye/face protection** Wear safety glasses with side shields or goggles.

#### Skin protection

**Hand protection** Rubber gloves. Confirm chemical compatibility with a reputable supplier first.

**Other** As required by employer code.

**Respiratory protection** A respirator is not needed under normal conditions of use.

**Thermal hazards** Not available.

**General hygiene considerations** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and Chemical Properties

<b>Appearance</b>	Clear
<b>Physical state</b>	Liquid.
<b>Color</b>	Orange.
<b>Odor</b>	Slight detergent chemical odor, no fragrance added.
<b>Odor threshold</b>	Not available.
<b>pH</b>	< 0.5 (Concentrate)
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	> 212 °F (> 100 °C)

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<b>Pour point</b>	Not available.
<b>Specific gravity</b>	1.28
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	< 1 (BuAc=1)
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	Complete
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	< 100 cP
<b>Other information</b>	
<b>Bulk density</b>	10.66 lb/gal

## 10. Stability and Reactivity

<b>Reactivity</b>	None known.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Conditions to avoid</b>	Do not mix with other chemicals.
<b>Incompatible materials</b>	Oxidizers. Reducing agents.
<b>Hazardous decomposition products</b>	Alkalis, organic materials, metals, and moisture. Do not mix with bleach or chlorinated products as chlorine gas will result. Hazardous decomposition should not be produced under normal conditions of storage and use.

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## 11. Toxicological Information

### Information on likely routes of exposure

<b>Skin contact</b>	Skin contact may cause pain or irritation, redness, or blistering.
<b>Eye contact</b>	Causes serious eye damage. Direct contact with eyes may cause pain, watering and redness.
<b>Inhalation</b>	Prolonged inhalation of mists may produce symptoms of coughing and respiratory tract irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness, pain, irritation, and blistering.

### Information on toxicological effects

**Acute toxicity** Oral, LD50 (rat), mixture, 5,460 mg/kg

Components	Species	Test Results
Phosphoric acid, 75% (CAS 7664-38-2)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	3,160 mg/kg
<i>Inhalation</i>		
LC50		not available
<i>Oral</i>		
LD50	Rat	1,530 mg/kg
<b>Skin corrosion/irritation</b>	Causes severe skin burns.	
<b>Exposure minutes</b>	Not available.	
<b>Erythema value</b>	Not available.	
<b>Oedema value</b>	Not available.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage. Direct contact with eyes may cause pain, watering, and redness.	
<b>Corneal opacity value</b>	Not available.	
<b>Iris lesion value</b>	Not available.	
<b>Conjunctival reddening value</b>	Not available.	
<b>Recover days</b>	Not available.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Not available.	
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.	

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<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	
	Not listed.
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not available.
<b>Chronic effects</b>	Prolonged inhalation may result in coughing and respiratory tract irritation.
<b>Further information</b>	Not available.

## 12. Ecological Information

**Ecotoxicity** No known significant effects or critical hazards.

Components	Species	Test Results
Phosphoric acid (CAS 7664-38-2)		
<b>Aquatic</b>		
Fish	LC50 Mosquito fish	138 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Mobility in general</b>	Not available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.

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### 13. Disposal Considerations

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<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

### 14 Transport information

<ul style="list-style-type: none"> <li>• 14.1 UN-Number</li> <li>• DOT-AIR, ADR, ADN, IMDG, IATA</li> </ul>		NA1760
<ul style="list-style-type: none"> <li>• 14.2 UN proper shipping name</li> <li>• DOT-LAND (ST-1257)</li> <li>• DOT-AIR (ST-1257)</li> </ul>		Cleaning Compounds, NOI, liquid. NA1760, Compounds, cleaning liquid, (containing phosphoric acid), 8, PG III, Ltd. Qty.
<ul style="list-style-type: none"> <li>• 14.3 Transport hazard class(es)</li> </ul> This product can ship as Limited Quantity if packaged in ≤5 quarts (5.0 Liters) containers (Non Hazardous)		
<ul style="list-style-type: none"> <li>• DOT-AIR, IMDG, IATA (ST-1257)</li> </ul>		
		8 Corrosive 8
<ul style="list-style-type: none"> <li>• Class</li> <li>• Label</li> </ul>		
<ul style="list-style-type: none"> <li>• DOT-LAND (ST-1257)</li> </ul>		
		
<ul style="list-style-type: none"> <li>• Class</li> <li>• Label</li> </ul>		N/A LTD. QTY.

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• 14.4 Packing group	III
• DOT, ADR, IMDG, IATA	III
• 14.5 Environmental hazards:	
• Marine pollutant:	No
• 14.6 Special precautions for user	Warning: Corrosive Substances
• Danger Code:	80
• EMS Number	F-A,S-B
• Segregation groups	Alkalis
• 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
• Transport/Additional information:	Not applicable.

## 15. Regulatory Information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 8(b) Inventory: All components are listed or exempted.**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Phosphoric acid, 5,000 lbs.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Immediate Hazard	- Yes
Delayed Hazard	- No
Fire Hazard	- No
Pressure Hazard	- No
Reactivity Hazard	- No

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** Acute: yes

**SARA 313 (TRI reporting)** No

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**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)**

Not regulated.

**Food and Drug Administration (FDA)**

Not regulated.

**US state regulations**

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

None

**US. Massachusetts RTK - Substance List**

Phosphoric acid (CAS 7664-38-2)

**US. New Jersey Worker and Community Right-to-Know Act**

Phosphoric acid (CAS 7664-38-2)

**US. Pennsylvania RTK - Hazardous Substances**

Phosphoric acid (CAS 7664-38-2)

**US. Rhode Island RTK**

Phosphoric acid (CAS 7664-38-2)

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

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## 16. Other Information

**Disclaimer** Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

**Issue date** 11/08/2017

**SDS File Name** AM10 I & I Calcium, Lime and Rust Remover SDS

**Further information** Not available.

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